

raising the temperature of the strip to a temperature higher than the temperature of onset of pearlitic transformation Ac_1 ,

holding the strip above this temperature for a duration of longer than 10 seconds,

rapidly cooling the strip to a temperature below 100°C at a cooling rate $\geq 100^{\circ}\text{C}$ per second,

thermally treating the strip at a low temperature ranging between 100°C and 300°C for a duration in excess of 10 seconds, and

cooling the strip to room temperature.

10. (Amended) A steel sheet with low aluminum content, comprising:
between 0.050 and 0.080% by weight of carbon,
between 0.25 and 0.40% by weight of manganese,
less than 0.020% by weight of aluminum, and
between 0.008 and 0.016% by weight of nitrogen, the remainder being iron and inevitable trace impurities, wherein

when in an aged condition said sheet comprises a percentage elongation A% satisfying the relationship:

$$(750 - R_m)/16.5 \leq A\% \leq (850 - R_m)/17.5$$

where R_m is the maximum rupture strength of the steel, expressed in MPa.

11. (Amended) The steel sheet according to claim 10, wherein said steel sheet comprises further:

COTTRELL atmospheres and/or epsilon carbides.--

Please add the following new claims:

--13. (New) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a grain count per mm² greater than 30,000.

14. (New) The steel sheet according to Claim 10, comprising:

between 0.055 and 0.075% by weight carbon,

between 0.27 and 0.37% by weight manganese,

less than 0.015% by weight aluminum, and

between 0.009 and 0.014% by weight nitrogen.

15. (New) The steel sheet according to Claim 10, comprising:

between 0.060 and 0.070% by weight carbon,

between 0.30 and 0.35% by weight manganese,

less than 0.010% by weight aluminum, and

between 0.010 and 0.012% by weight nitrogen.

16. (New) The steel sheet according to Claim 10, comprising:

between 0.010 and 0.014% nitrogen.

17. (New) The steel sheet according to Claim 10, wherein said steel sheet further comprises:

a gram count per mm² greater than 40,000.

18. (New) The steel sheet according to Claim 9, wherein after said rapidly cooling and prior to said thermally treating, a plastic deformation operation is performed comprising an elongation of the strip with a percentage elongation ranging between 1 and 5%.--

IN THE ABSTRACT OF THE DISCLOSURE

Page 16, beginning at line 2 and ending at line 31, delete the present Abstract and insert therefore the new Abstract on the following sheet.